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ISO/TC 69
APPLICATION OF STATISTICAL METHODS
INTERNATIONAL MEETING HELD AT AFNOR,
PARIS, FRANCE, 1982-10-13/22

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November 1982

(For submission to the Standards Council of Canada)

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Analytical Methodology

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DEC 13 1982

MICROMEDIA

ISO/TC 69
APPLICATION OF STATISTICAL METHODS
INTERNATIONAL MEETING HELD AT AFNOR, PARIS, FRANCE, 1982-10-13/22

by

R. Sutarno*

This report covers the plenary meeting of ISO/TC 69 (Application of Statistical Methods), SC 3 - Application of Statistical Methods in Standardization, SC 4 - Statistical Quality Control, SC 6 - Application of Precision Data and the joint working group between ISO/TC 69/SC 6 and ISO/REMCO. The meetings of SC 2 and SC 5 will be reported by the leaders of the Canadian delegations to the respective sub-committees and SC 4/WG 2 by the convener of the working group.

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The meeting was attended by delegates from 14 countries — Belgium, Canada, Denmark, France, Germany, Hungary, India, Italy, Japan, Netherlands, Sweden, U.K., U.S.A. and U.S.S.R. Canada was represented by R. Lassard (SC 5), P. Jui (SC 2), S. Puri (SC 4/WG 2) and R. Sutarno (TC 69, SC 4, SC 6). There were meetings of all the sub-committees except SC 1. In addition there was also the first meeting of the joint working group between ISO/TC 69/SC 6 and ISO/REMCO. The overall meeting schedule is appended to this report.

ISO/TC 69 Plenary Meeting

This meeting was the first plenary meeting since the Philadelphia meeting in 1979. Both the sub-committees' activities during the past three years and the decisions made during the meeting were reported. The secretariat report describing the former was issued as document ISO/TC 69 N 241 (Appendix 2).

The result of the enquiry on the implementation of and the periodic five-year revision of ISO 3207, 3494, 3301, 2854 and 3534 (document ISO/TC 69 N 239E) was discussed under item 13(a). The following decisions were made at the meeting.

Standards	Decision
ISO 3207	No revision.
ISO 3494	Secretariat of SC 2 will try to correct the errors detected by various member bodies. The need for revision will depend on the magnitude of the errors.
ISO 3301	SC 2 will review this standard for possible revision.
ISO 2854	No revision.
ISO 3534	Under revision.

The central secretariat advises that any work program that has been inactive for the past five years should be deleted. Consequently, all work programs listed in document ISO/TC 69 N 238 agenda 13(b) with the exception of items 4 - Rounding, 23 - Goodness of fit tests and 24 - Error of the second kind have been deleted. These programs can be reactivated when the need arises.

ISO/TC 69/SC 1 (Terminology and Symbols)

This sub-committee did not meet. The secretariat reported that due to the general budgetary cut at AFNOR, France wishes to relinquish the secretariat of SC 1. However, no member body volunteered to take over the task. It was decided that, until a new secretariat can be found, the TC secretariat will look after the secretariat of SC 1. WG 1 (general statistical terms) has been dissolved and the remaining program will be taken over by WG 2.

ISO/TC 69/SC 2 (Interpretation of Statistical Data)

Three standards have been under development during the past three years:

(a) estimation of a proportion
(b) comparison of two proportions
(c) estimation of median

Technically, the draft proposal of the above standards has reached an acceptable stage. The next draft will be in the form of DIS.

The future work of the sub-committee consists of the following:

(a) outliers
(b) rounding
(c) goodness of fit tasks

Canada offered to write the draft for item (c).

Detailed results of the meeting will be reported by the leader of the delegation.

ISO/TC 69/SC 3 (Application of Statistical Methods in Standardization)

Although at present Canada is an "O" (Observer) member of this sub-committee, it was decided that in view of the importance of the subjects discussed at the meeting, Canada should be represented. Three documents on the statistical principles of sampling, both for bulk and discrete commodities were discussed. These subjects are important to Canada in view of the

country's position as one of the major exporters of bulk commodities (iron ore, coal, grain, etc.). For this reason, subject to confirmation, Canada volunteered to join a working group on the subject (Appendix 3).

ISO/TC 69/SC 4 (Statistical Quality Control)

The work program of this sub-committee is divided into four parts. Working groups were formed to undertake the work of each part and WG 5 was formed to act as the coordinator.

WG 1 - Introduction to control charts	DP 7880
WG 2 - Shewhart control charts	Canadian document
WG 3 - Control cusum techniques	
WG 4 - Acceptance control charts	DP 7966
WG 5 - Technical coordination group	

In addition to the above document, a document entitled "Statistical Control of Technological Process Control Charts for Arithmetic Mean With Warning Limits" ISO/DP 7873, submitted by the secretariat, was also considered.

The sub-committee meeting was a short plenary meeting of all working groups. The detailed technical discussion took place in the working group meetings.

It was agreed that DP 7873, 7880, 7966 and the Shewhart document will be published simultaneously. The document on cusum control charts will be published subsequent to the first four standards.

With the publication of these five standards, SC 4 will have completed the first major task and must now plan for the future work (Appendix 4).

ISO/TC 69/SC 5 (Acceptance Sampling)

The activity report by the secretariat was issued as document ISO/TC 69 N 242 (Appendix 5). The report of the meeting will be written by the leader of the delegation.

ISO/TC 69/SC 6 (Application of Precision Data)

The following topics were discussed:

(a) Revision of ISO 5725 (WG 1)

"ISO 5725 - Precision of Test Methods - Determination of Repeatability and Reproducibility by Interlaboratory Tests" is the main document developed by SC 6. Since its issuance as a standard in 1981, there have been numerous objections, both editorial and technical in nature. It was decided at the Berlin meeting in 1981 that revision is required and a working group (WG 1) was formed to undertake this revision. It was found by the WG 1, however that more extensive revision to the standard is necessary. This will take more time. For this reason it was agreed to issue an intermediate revision of ISO 5725 early in 1983 to take care of immediate needs, and then more extensive revision will be done at a later date. The revised draft will be circulated to the members of SC 6 early in 1983.

(b) Joint working group between ISO/TC 69/SC 6 and ISO/REMCO

This meeting was the first meeting of the joint WG which was formed at the Paris/Berlin meeting, 1981, to handle the statistical aspect of reference materials. The meeting was held on October 13, 1982 from 10:00 a.m. to 5:30 p.m. and was attended by H. Marchandise and E. Colinet representing REMCO and T. Miyazu, P. Wilrich, R. Kaavis, H. Hamaker R. Sutarno and K. Petrick representing TC 69/SC 6.

The following documents were discussed simultaneously:

ISO Guide 30
ISO/REMCO 74
ISO/REMCO 88
ISO/TC 69/SC 6 N 49
ISO 5725
Japanese comments on ISO/REMCO 88.

The joint working group was informed that REMCO has decided to combine documents REMCO 74 and 88 into one ISO guide. After lengthy discussion, it was agreed that statistical methods play an important role in the preparation, certification and uses of reference materials, and SC 6 agreed to adapt this problem into one of its major work programs. It was also agreed to ask REMCO not to issue the above guide until members of SC 6 have had the chance to review it. More meetings of the joint working group are necessary.

(c) Effect of calibration and recalibration

Document ISO/TC 69/SC 6 N 62 on this subject was not accepted; the U.K. was asked to review it for the next meeting.

(d) Acceptability of results

This work is one of the routine applications of precision parameters (repeatability and reproducibility) determined by ISO 5725 for reporting laboratory results.

The project was started at the Philadelphia meeting in 1980. Canada has been a member of a study group on this project. The present document, ISO/TC 69/SC 6 N 67, is technically acceptable except on the question of "arbitration procedure in case of dispute between vendor and customer". The question to be clarified was whether the subject of "arbitration" is under the scope of TC 69. In addition, France proposes to expand the document to cover cases where more than two observations are performed by the laboratories as the routine procedure. A formal working group (WG 2) was formed to complete this work by the next meeting. This working group consists of B. Godfrey (U.S.A.), T. Miyazu (Japan) and R. Sutarno (Canada). B. Godfrey will serve as the convener. It is possible that a working group meeting will be called in the spring of 1983.

(e) Uncertainty of measurements

This project was introduced by the German delegation at the Berlin meeting. Two documents, ISO/TC 69/SC 6 N 69 - a French draft standard, and ISO/TC 69/SC 6 N 71 - a German proposal, were discussed. At this stage, the discussion was still at a "basic" level.

SUMMARY

Items to be Acted on Before the Minutes Arrive

a) ISO/TC 69/SC 3

i) SCC approval to change Canada's status to "P".

ii) If (i) is approved, the confirmation of Canada's membership on ISO/TC 69/SC 3/WG 1. (S. Puri)

b) ISO/TC 69/SC 6

i) Confirmation of Canada's membership on ISO/TC 69/SC 6/WG 2 (R. Sutarno).

Canadian Contribution to the Committee's Effort

With the exception of the convenerhsip of ISO/TC 69/SC 4/WG 2, the Canadian contribution has been limited to participation in the discussion during the meetings. This has been looked upon by other delegates as less than was expected from Canada. In the coming period (1982/83) Canada's contribution will increase by taking active parts in two more working groups (SC 3/WG 1) and (SC 6/WG 2) and a study group in SC 2.

Evaluation of the Importance of the Work to Canada

Canada is a major supplier of various bulk commodities (iron ore, coal, grain, etc.) as well as a trader of manufactured goods. The work of TC 69 provides a basis for other product committees to develop standards in their own areas. As examples, the work of SC 3 in the field of bulk sampling, and SC 6 on compliance to specification and

acceptability of results are important for TC 102 work, which in turn is important to Canada as one of the major iron ore exporting countries. The work of SC 4 is important for quality control operation for various industries.

Recommendation Regarding Canadian Participation

It is recommended that Canada should be a "P" (participating) member for TC 69 as well as all the sub-committees including SC 3.

Future Meetings

Because of the inclusion of the statistical aspects of reference materials in the work of SC 6, it was agreed that, if at all possible, the SC 6 meeting should be synchronized with REMCO. Other sub-committees may follow SC 6. In addition, it is possible that there will be a meeting of SC 6/WG 2 in the Spring of 1983.

APPENDIX 1

ISO/TC 69 Meeting Schedule

TC/SC	Date	Canadian Delegates
TC 69-9	1982-10-22	R. Sutarno (leader) R. Lassard
TC 69/SC 2-13	1982-10-18/19	P. Jui (leader) R. Sutarno
TC 69/SC 3-5	1982-10-20/21	R. Sutarno R. Lassard P. Jui S. Puri
TC 69/SC 4-5	1982-10-18/19	R. Sutarno (leader) S. Puri (convener of WG 2) P. Jui
TC 69/SC 5-6	1982-10-19/20	R. Lassard (leader)
TC 69/SC 6-6	1982-10-14/15	R. Sutarno (leader) R. Lassard
TC 69/SC 6 - REMCO	1982-10-13	R. Sutarno

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ISO/TC 69 N 241 OCTOBRE 1978

APPLICATION DES METHODES STATISTIQUES

APPENDIX 2

RAPPORT DU SECRETARIAT DU COMITE TECHNIQUE ISO/TC 69

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION «МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ» ORGANISATION INTERNATIONALE DE NORMALISATION

Adresse du Secrétariat ISO/TC

AFNOR - Tour Europe - Cedex 7 - 92080 Paris La Défense

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AFNOR 611274 F

1) NORMES PUBLIEES DEPUIS 1978

ISO 2602 (1980) : Interprétation statistique de résultats d'essais - Estimation de la moyenne - Intervalle de confiance

Statistical interpretation of test results - Estimation of the mean - Confidence interval

ISO 3951 (1981) : Règles et tables d'échantillonnage pour les contrôles par mesures des pourcentages de défectueux

Sampling procedures and charts for inspection by variables for percent defective

ISO 5725 (1981) : Fidélité des méthodes d'essai - Détermination de la répétabilité et de la reproductibilité par essais interlaboratoires

Precision of test methods - Determination of repeatability and reproducibility by inter-laboratory tests

2) DIS EN COURS DE VOTE COMBINE

DIS 5479 : Test de normalité

Normality tests

Clôture du vote décembre 1982

DIS 7962 : Plans d'échantillonnage par attributs indexés suivant la qualité limite nominale pour lots considérés isolément

Attribute sampling plans indexed by nominal limiting quality (LQ) for lots considered in isolation

Vote clos depuis mars 1982, observations en cours d'étude au TC 69/SC 5

DIS 7804 : Terminologie des plans d'expérience

Terminology for design of experiments

Clôture du vote mars 1983

3) NOMBREUX DP EN COURS DANS LES DIFFERENTS SOUS-COMITES

SC 2

DP 7868 : Estimation d'une proportion
Estimation of a proportion

DP 7965 : Comparaison d'une proportion à une valeur donnée
Comparison of a proportion with a given value

DP 7972 : Comparaison de deux probabilités
Comparison of two probabilities

... ...

SC 3

DP 7870 : Guide pour les applications des méthodes statistiques en normalisation et dans les spécifications
Applications of statistical methods in standardization and specifications Guide

DP 7869 : Guide pour la sélection des méthodes d'échantillonnage
Guide for sampling selection methods

SC 4

DP 7870 : Introduction aux cartes de contrôles
Introduction to control charts

DP 7871 : Introduction aux cartes de contrôle pour sommes cumulées
Introduction to cumulative sum charts

DP 7873 : Contrôle statistique des procédés technologiques - cartes de contrôle de la moyenne arithmétique avec limites de surveillance
Statistical control of technological processes - control charts for arithmetic mean with warning limits

DP 7966 : Cartes de contrôle pour acceptation
Acceptance control charts

SC 5

DP 2859 : Règles et tables d'échantillonnage pour les contrôles par attributs
Sampling procedures and tables for inspection by attributes

DP 7493 : Plan d'échantillonnage avec critère d'acceptation zéro
Sampling plans with zero acceptance criteria

Les autres documents en cours d'étude feront l'objet des rapports des secrétariats des différents sous-comités :

SC 6

DP 7872 : Effets de l'étalonnage et du réétalonnage
Effects of calibration and recalibration

-) NORMES INTERNATIONALES EN COURS DE REVISION

ISO 3534 au SC 1
ISO 2859 et 2859 ADD 1) au SC 5
ISO 3951
ISO 5725 au SC 6

Toutes les normes publiées depuis plus de cinq ans devaient faire l'objet d'une enquête en vue d'une reconfirmation ou d'une révision. Le secrétariat a procédé à cette enquête pour ce qui concerne les normes :

.../...

ISO 3207 : Interprétationstatistique des données - Détermination d'un intervalle statistique de dispersion
Statistical interpretation of data - Determination of a statistical tolerance interval

ISO 3494 : Interprétation statistique des données - Efficacité des tests portant sur des moyennes et des variances
Statistical interpretation of data - Power of tests relating to means and variances

ISO 3301 : Interprétation statistique des données - Comparaison de deux moyennes dans le cas d'observations appariées
Statistical interpretation of data - Comparison of two means in the case of paired observations

ISO 2854 : Interprétation statistique des données - Techniques d'estimation et tests portant sur des moyennes et des variances.
Statistical interpretation of data - Techniques of estimation and tests relating to means and variances.

Les résultats de cette enquête sont consignées dans le document ISO/TC 69 N 239 inscrit au point 13 de l'ordre du jour de la réunion plénière.

5) CREATION DE GROUPES DE TRAVAIL

Compte-tenu du plan de charge important des sous-comités plusieurs groupes de travail ont été créés dans chacun d'eux :

SC 4/GT 1 "Introduction aux cartes de contrôle"
SC 4/GT 2 "Cartes de contrôle de SHEWART"
SC 4/GT 3 "Techniques de contrôle cumulatives"
SC 4/GT 4 "Cartes de contrôle d'acceptation"
SC 4/GT 5 "Groupe de coordination technique"

SC 5 GT - "Plans d'échantillonnage séquentiels"

SC 6 GT 1 "Revision de l'ISO 5725".

6) QUESTIONS NOUVELLES AJOUTEES AU PROGRAMME DE TRAVAIL DU TC 69

Essentiellement deux questions :
"Incertitude de mesurage" attribuée au SC 6 après enquête en septembre 1981.
"Echantillonnage des matériaux en vrac" attribuée au SC 3 après enquête en octobre 1981.
Trois autres questions nouvelles découlant des travaux en cours dans le SC 5 et SC 6 :
- révision de l'ADD 1 de l'ISO 2859
- révision de l'ISO 5725
- aspects statistiques de la preparation et de l'utilisation des matériaux de références (groupe mixte ISO/REMCO)

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ISO/TC 69/SC 3 N 48 OCTOBRE 1982

APPLICATION DES METHODES STATISTIQUES
APPLICATION DES METHODES STATISTIQUES EN
NORMALISATION

APPENDIX 3

RESOLUTIONS PRISES LORS DE LA REUNION DU

TC 69/SC 3 A PARIS LE JEUDI 21 OCTOBRE 82

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CLC/LC

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SC 3 RESOLUTION 9 E (DP 7874)

SC 3 charges the secretariat to develop a second draft of DP 7874 for SC 3 postal ballot. Members were requested to send comments in line with the modifications agreed at the 5 meeting given in report N 49 by not later than 31 december 1982.

SC 3 RESOLUTION 10 E

SC 3 establishes the following working group : SC 3/WG 1 :
M. HAMAKER (PAYS-BAS) - M. PURI (CANADA)* M. PAIGE (UK) Convenor - M. CHARTIER (France) - M. TORNBLOM (Suède) to develop :
a) A second draft of DP 7869 retitled : guide to the principles of sampling covering :
   (1) general aspects common to the sampling of both discrete items and bulk commodities
   (2) discrete items
   (3) bulk commodities
(b) A separate document(s) on estimation and acceptance procedures for bulk commodities in :
   (1) bulk form
   (2) packaged discrete form
based on agreements reached at the 5 meeting (report N 49) and taking account of N 43, N 46 draft DIN 55350 par 14 - JIS 9100 - ISO 3081 to 3086.

SC 3 RESOLUTION 9 F (DP 7874)

Le SC 3 charge le secrétariat de développer un second avant projet DP 7874 pour vote par correspondance au sein du SC 3.
Les membres du SC 3 sont invités à envoyer leurs commentaires en accord avec les modifications adoptées à la 5ème réunion du SC 3 - compte-rendu N 49 au plus tard le 31 décembre 1982.

SC 3 RESOLUTION 10 F

Le SC 3 créé le groupe de travail suivant :
SC 3/GT 1 : M. HAMAKER (PAYS-BAS) - M. PURI (CANADA) - M. PAIGE (UK) convenable - M. CHARTIER (FRANCE) - M. TORNBLOM (SUEDE) pour préparer :

(a) un second avant-projet DP 7869 avec le nouveau titre suivant :
   "Guide relatif aux principes d'échantillonnage"
   couvrant
   (1) aspects généraux communs à l'échantillonnage des lots d'individus discrets et de matériaux en vrac,
   (2) individus discrets
   (3) matériaux en vrac
(b) un (ou les) document séparé sur les procédures d'estimation et d'acceptation pour les matériaux en vrac
   (1) en vrac au sens propre du terme
   (2) groupés en unités discrètes
basé sur les accords dégagés lors de la 5ème réunion (rapport N 49) en prenant en considération les documents N 43, N 46, projet DIN 55350 partie 14 - JIS 9100 - ISO 3081 à 3086.

* (to be confirmed) because Canada is "O" member for the time being.

APPENDIX 4

CHAIRMAN AND WORKING GROUPS REPORT OF THE MEETING OF ISO/TC 69/SC 4, 1982-10-21/22

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ISO/TC 69 N 243 OCTOBRE 1982

APPLICATION DES METHODES STATISTIQUES

ISO TC 69 SC - QUALITY CONTROL - ORAL REPORT OF CHAIRMAN FOR TC 69

MEETING 22 OCTOBER 1982

The subcommittee -, Quality Control, met in plenary session at 13 h 30 on 19 October 1982, following the agenda as given in document N 68. Mrs MERLE welcomed the subcommittee on behalf of AFNOR.
At the request of the subcommittee secretariat represented by Mr. BOGATYREV, BOSI, the chairman of the meeting was designated to be Mr MARQUARDT, US. The meeting was composed of twenty five representatives of eleven countries, document SC - N 72.
The record of the meeting will be transmitted to BOSI by Mrs MERLE.
The drafting committee consisted of Mrs MERLE (AFNOR), M. HARRIS (UK), and M. LELIEVRE (France).
At the first plenary session, the convenors of the working groups 1, 2, 3, - reported on the status of the work in their groups.
Following the plenary session working group 5 met to discuss coordination of the SC - work. It was agreed that SC - should publish four basic standards simultaneously to provide perspective and clarity of purposes to the users of the standards. This would include DP 7873, 7880, 7966 and the SHEWHART standard being developed in working group two. The cusum standards being developed in working group 3 could be published subsequent to the first four standards. Working groups 1, 2, 3, - met in the afternoon of 19 october and the morning of 20 october, with good progress leading to the attended work. Working group 5 held a second time at noon on 19 october to confirm and coordinate the development.
A second plenary session of SC - was held at 13 : 30 h on 19 october. The subcommittee recommended that the standards be approved by TC 69 for circulation and ballot according to the resolution prepared by SC -. The chairman and the secretariat of SC - thanked the delegates and the convenors for their good work in bringing the various proposed standards so far along. The SC - discussed briefly possible items of further work. The chairman requested that the delegates, and especially the working group convenor's, submit before the next meeting proposal for further work items since the SC - is nearing completion of its first major work and must now do careful planning for the next several years.

D.W. MARQUARDT, USA
for the secretariat, BOSI

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MEETING OF ISO TC69/SC 4/ WG 1

The meeting of TC 69/SC 4/WG 1 was called to order by the convenor MrFREUND, at 14 h. Present for the meeting were Messers BOGATYREV (URSS), VINOGRADOV (URSS), DUKATI (Hungary), TRUSCOTT (UK), TORNBLOM (Sweden), BERGMAN (Sweden), RAY (India), LELIEVRE (France) and PETRICK (Germany).

The first item covered was a review of the comments received by the SC 4 Secretariat to DP 7880 "General guide and introduction to control charts".
Nine approvals, three disapprovals and one abstention were recorded in the secretariat summary along with comments submitted by nine of the respondees. In addition, M. DUKATI indicated that Hungary wished to abstain.

The comments were each discussed and their disposition decided at the meeting. Most involved relatively small changes of an editorial nature. One involved the question of including a reference list in the standard. It was agreed that if included it would be as an attached appendix rather than part of the standard and that it not include any material from a national standard.
There was a feeling that references would be useful if the right ones were obtainable, but doubt was expressed that this could be accomplished with the restrictions of time and permissible material. Members were asked to propose appropriate documents to the convenor by November 30, 1982.
A comment recommending that the standard define many control chart terms was rejected since this is an appropriate task of TC 69/SC 1. Comments centering on comparisons of performance measures of various charts were felt to be inappropriate at this time but should be considered for a subsequent revision following completion of several specific control chart standards.
It was unanimously decided that the convenor should make the agreed upon changes in the draft before march 31, 1983 and that the working group should recommend to the SC 4 plenary session that the draft should be released to the next standardization stage for concurrent balloting and publication with the drafts on the"Shewhart control chart", the "Acceptance control chart" and the "Control chart for Arithmetic Mean with warning limits and consideration of runs of observations".
The second item of the meeting was a review of the comments received by the SC secretariat to DP 7873 "Control charts for the Arithmetic mean with warning limits". Eight approvals and five disapprovals were recorded in the secretariat summary along with comments submitted by ten of the respondees.*
Since the action considered appropriate by the secretariat was listed in the report, the meeting discussed only those actions questioned or those referred to the meeting for discussion. Most of the latter involved relatively small changes of an editorial nature. There was discussion about the need to be more explicit in the title concerning the use of "run theory", a major distinction between these charts and the Shewhart Charts. A suggested title change to reflect this was made, namely "control chart for arithmetic mean with warning limits and consideration of runs of observations". Several participants reiterated the essential need to publish the Shewhart control chart document no later than the publication of this proposal.
It was decided that the secretariat should make the agreed upon changes in the draf before March 31, 1983 and that the working group should recommend to the SC 4 plenary session that the draft should be released to the next standardization stage for concurrent balloting and publication with the drafts for the "Shewhart control chart", the "acceptance control chart" and the "general guide and introduction to control charts".

The meeting was adjourned at 18:30 hours.

* Mr BOGATYREV indicated on behalf of the secretariat that Hungary also approved.

ISO/TC 69/SC 4/WG 2
PARIS - 19 OCTOBER 1982

REPORT OF TC 69/SC 4/WG 2 BY M. PURI, CONVENOR WG2

MEMBERS :

S.C PURI (Canada) - Convenor
R. GOMNIN (France)
C.A.R. HARRIS (UK)
T. MIYAZU (Japan)
S. OHDACHI (Japan)

1. Document : ISO/TC 69/SC 4/WG 2/ N 2 "Shewhart Control Charts"

a) WG 2 recognizes the urgency with which this document is required for publication with regards to the other documents being prepared by the other working groups of SC 4.

b) WG 2 is now ready with the above document and will send a completed version to the SC 4 and TC 69 secretariats by the end of november 1982.

c) WG 2 request that SC 4 make a resolution that the completed document can be given a DP number.

2. Document : N 59 "Guide to number defective charts for quality control"

a) Further to the Berlin meeting in September 1981, WG 2 declines at this moment in time to incorporate the document into that earlier mentionned "Shewhart control charts".

b) Further consideration of N 59 as either an ISO document or its incorporation into some other document is postponed until the next SC 4 meeting.

3. Further work

a) WG 2 strongly recommends that SC4 consider two further items of work

(i) the preparation of a document concerning control charts for individuals and
(ii) the preparation of a document concerning the interpretation of control chart patterns.

b) WG 2 would be prepared to assist in this work if SC 4 deemed it to be desirable.

ISO TC 69/SC - GT 3
PARIS - OCTOBER 1982

ISO/TC 69/SC -/GT 3 "Cumulative sum charts"

Report to SC -

Based upon the discussions of working group 3 at the Berlin meeting in september '98', the convenor
Dr D. FARLIE (Royaume-Uni) prepared the introduction
cusum of document TC 69/SC -/GT 3 N ' september '982) for discussion at this meeting. Document N 1 of working group 3 incorporates concepts from SC - documents N -8, N -9 and N 90.
The working group drafted a number of revisions to document N 1 and developed the conceptual framework for further revisions. The members of the working group will submit to the convenor by 1 January 1983 specific drafts for the future revisions.
The convenor will then incorporate these into an harmonized document.
The working group recommends that SC - authorize at this meeting circulation of the harmonized document, when available to SC -, as a draft proposal for vote and comments.
Subsequently, working group 3 plans to develop at least two further cusum documents. These would include a document on cusum procedures for normally distributed variables and a document on cusum procedures for counted data.

M. D. FARLIE (UK) Convenor
M. BOGATYREV (USSR)
M. LESSARD (CANADA)
M. MARQUARDT (USA)
M. SATTLER (Germany)

ISO/TC 69/SC 4/WG 4
PARIS - OCTOBER 1982

MEETING OF TC 69/SC 4/WG 4

The meeting of TC 69/SC 4/WG 4 was called to order by the convenor, M. FREUND, at 0900 h. Present for the meeting were Messers BOGATYREV (USSR), VINOGRADOV (USSR), DUKATI (HUNGARY), TRUSCOTT (UK) TORNBLOM (SWEDEN), BERGMAN (SWEDEN), AND FRANZKOWSKI (GERMANY,FR).

The comments received by the SC 4 secretarait to DP 7966 "Acceptance control charts" were reviewed. Nine approvals and five disapprovals were recorded with M. DUKATI indicating approval by Hungary provided the nomographs were removed from the main document, and with M. FREUND indicating US approval.

The comments were each discussed and their disposition decided at the meeting. It was agreed that the material on attribute charts would be reduced to a single paragraph indicating that these types of charts were possible. All nomographs relating to these charts will be deleted. It was also agreed that the numerical examples of the previous draft would be reinserted and that the nomographs in figures 3, 4, 9, 10 11, 12, 13, 14 would be explained more fully and shifted to an appendix as an alternate method to beincluded with, but not be part of the standard. It was also agreed that all examples would be given in metric units.

It was unanimously decided that the convenor should make the agreed upon changes in the draft before march 31, 1983 and that the working group should recommend to the SC 4 plenary session that the draft should be released to the next standardization stage for concurrent balloting and publication with the drafts of the "Shewhart control chart", the "control chart for arithmetic mean with warning limits and consideration of runs of observations" and the "general guide and introduction to control charts".

The meeting adjourned at 10:45 h.

A F N O R

RESOLUTIONS TAKEN
OF TC 69/SC 4 MEETING
PARIS 1982

DRAFT RESOLUTION 1

That SC 4 adopts the reports of the convenors of WG 1, 2 and 4.

Consequently the following items are taken as being decided :

1. The revised version of DP 7873, DP 7880 and 7966 will be sent to SC 4 members for information and to the Secretariat of TC 69 for submission to the ISO Central Secretariat as DIS documents. Each DIS will be circulated for combined vote.

2. WG 2 having completed its task on Shewhart control charts, its document will be sent to the Secretariat of TC 69 for registration as a DP document and then be subsmitted for voting by the "P" members of SC 4.

3. Coordination should be such that the documents listed under points 1 and 2 will be processed simultanously at the DIS stage.

DARFT RESOLUTION 2

That SC 4 adopts the report of the convenor of WG 3 and consequently the document " Introduction of cusum techniques ",when ready,will be sent the the secretariat of TC 69 for registration as a DP document and then circulated for voting to "P" members of SC 4.

A F N O R

PROJET DE RESOLUTION 1

Le SC 4 adopte les rapports des responsables des groupes de travail 1, 2 et 4. Conséquemment les décisions suivantes ont été prises :

1. Les versions révisées des DP 7873, DP 7880, et DP 7966 seront envoyées aux membres du SC 4 pour information, et au secrétariat du TC 69 pour soumission au Secrétariat central de l'ISO en tant que DIS. Chaque DIS fera l'objet d'un vote combiné.

2. Le GT 2 ayant terminé sa tache sur les " cartes de contrôle Shewhart", ce document sera adressé au Secrétariat du TC 69 pour enregistrement en tant que DP. Ce DP sera ensuite soumis au vote des membres " P " du SC 4.

3. La coordination des travaux devra être telle que les documents mentionnés aux points 1 et 2 ci-dessus devront parvenir en même temps au stade DIS.

PROJET DE RESOLUTION 2

Le SC 4 adopte le rapport du responsable du groupe de travail 3. Conséquemment le document " Introduction aux cartes de contrôle par sommes cumulées ", quand il sera prêt, devra être adressé au Secrétariat du TC 69 pour enregistrement en tant que DP. Ce DP sera ensuite diffusé pour vote aux membres "P" du SC 4.

APPENDIX 5

ACTIVITY REPORT BY SECRETARIAT OF ISO/TC 69/SC 5 "ACCEPTANCE SAMPLING"

Secretariat

afnor

association française de normalisation

ISO/TC 69 N 242

PARIS - OCTOBER 1980

APPLICATIONS DES METHODES STATISTIQUES

ACTIVITY REPORT BY SECRETARIAT

OF ISO/TC 69 SC 5 "ACCEPTANCE SAMPLING"

1. CONSTITUTION

Since our last report increasing interest in our work has been confirmed by the addition of the following members :

New "P" members : Canada
Denmark
Sri Lanka

New "O" members : China
Egypt
Mexico
Tanzania

making a total of 19 "P" members, 10 "O" members plus liaison members from OIML, EEC and IEC/TC 56.

2. CURRENT WORK PROGRAMME

2.1. DIS 7362 (LQ Plans)

Priority has been given to the development of LQ sampling plans for use wi isolated lots and SC 5 noted with satisfaction the 22 : 3 vote in favour of DIS 7362. Subject to editorial corrections it was agreed in Paris that a revised draft (SC 5 N 140 prepared by the SC 5 Secretariat) should be sent for publication as a "Supplement to ISO 2859" (not as ISO 7362). With this designation change the German MB said they would change their vote to positive. Similarly it is hoped that further editorial adjustment may enable France change their vote prior to publication.

2.2. DP 7843 (Ac = 0 Plans)

The SC 5 postal ballot vote on this proposal was inconclusive (7 : 7). Consequently this DP and related documents (referred to in SC 5 N 147) were transferred to SC 5/WG 1 for further consideration. Concern was expressed that the risk implications, of standardization and certification authorities in particular continuing to specify Ac = 0 plans was not fully appreciated.

Since zero nonconformities in a small sample did not necesserily mean zero in the lot.

SCC/EP

2.3. SC 5 WORKING GROUPS

The three WG's established at Philadelphia '979 and the fourth established at Berlin '98' are all now functioning very satisfactorily :

SC 5/WG 1 "Classification of sampling problems" Convenor Mr. MUNDEL - USA

A "Guide to the selection of acceptance sampling plan is to be registered an ISO/DP and circulated for SC 5 ballot by Spring '983.

SC 5/WG 2 "Revision of ISO 2859 (Convenor Prof. WADSWORTH - USA)

Clarifications to the text regarding the use of terms such as "Responsible Authority", AQL, LQ, Defect and Non-conformity were co-ordinated in Paris with the work of SC 5/WG 2, as a result of the comments submitted on DP 2859 "Sampling by Attributes" which was approved by 13 : 2 at the SC 5 ballot stage.

Together with the existing tables a revised draft will now be sent forward to the Secretariat of ISO/TC 69 for DIS vote in '983. Also Rejection will be changed to Non-acceptance where appropriate.

SC 5/WG 3 Revision of ISO 3951 (Convenor Mr YOKOH - Japan)

Comprehensive work is being carried out on the design of new master tables for double sampling by variables.

Further to this WG 3 is currently a series of amendments to the text and charts of ISO 3951 which were initiated by the discovery of a series of printing errors.

WG 3 is also co-ordinating its work closely with WG 2 and it is likely that a short term revision of ISO 3951 will be to take account of the Revision of ISO 2859.

SC 5/WG 4 "Sequential and Continous Sampling Plans (Convenor M. VESSEREAU - France)

Within one year of its formation it is pleasing to report that WG 4 has prepared two new documents, on attribute and variables sampling, which will be registered as ISO/DP's and circulated for postal ballot by early '982.

3. FUTURE WORK

3.1 Work programme

Of the outstanding items in the current work programme :

Item 69/ Revision of the guide to ISO 2859 (Addendum N° 1) has he allocated to SC 5/WG 2.

Item 69/ Continuous sampling plans have been allocated to WG -.

Further to this SC 5 recommends the following amendments :

a) Deletions :

(i) Acceptance sampling for relability (Item 69/27)
(ii) Verification sampling (Item 69/31)
(iii) Sampling for the control of variance (Item 69/33)

(b) Additions :

(i) Skip lot sampling plans
(ii) Chain lot sampling plans

3.2 Advisory and promotional services

In supporting the overall advisory role of ISO/TC 69 during the last three years. There has been an increasing demand for advise and assistance from both national an international committees (TC 69 Resolution 40 - Philadelphia)
Due partly to a lack of statistical resources with the SC 5 secretar and the pressure of work in other fields, it has not always been possible to allocate sufficient time to this important function. However it is pleasing to report that the basic reference standards produced by SC 5 (ISO 2859 and ISO 3951) are now being used and specified on an increasing scale world wide.

H.A CROASDALE
for ISO/TC69/SC 5 secretariat

OCTOBRE 1981

APPENDIX 6

RESOLUTIONS PRISES LE 1er OCTOBRE 1981 A PARIS

RESOLUTION 1 E

SC 6 accepts Mr WILRICH as chairman for the next three years period.

RESOLUTION 1 F

Le sous-comité 6 nomme M. WILRICH comme président pour les trois prochaines années.

RESOLUTION 2 E

SC 6 requests its secretariat to submit the working draft on the revision of ISO 5725 (elaborated by SC 6/GT 1) for SC 6 ballotting on :

- acceptance on the editorial proposed changes
- acceptance, that the revision falls within clause 6.11.2 of ISO Directives.

RESOLUTION 2 F

SC 6 demande à son secrétariat de soumettre le document de travail relatif à la révision intermédiaire de l'ISO 5725 (élaboré par le GT 1) au vote du SC 6 sur :

- l'acceptation des modifications rédactionnelles proposées,
- le fait que la révision suive la procédure du paragraphe 6.11.2 des Directives de l'ISO.

RESOLUTION 3 E

ISO/TC 69/SC 6 established an ad hoc group with the task of revising ISO/DP 7972 "The effects of calibration and recalibration". The group will consist of :

M. OAKLAND, convenor
M. WHITTAKER
M. HAMAKER
Mlle NEVILLY
M. MUNDEL
M. MIYAZU

The group shall send the revised document to the secretariat for circulation to all members of SC 6 by may 31, 1983.

RESOLUTION 3 F

L'ISO/TC 69/SC 6 établit un groupe ad hoc chargé de réviser l'ISO/DP 7972 "Les effets de l'étalonnage et du réétalonnage". Le groupe se composera de :
M. OAKLAND, convenor
M. WHITTAKER
M. HAMAKER
Mlle NEVILLY
M. MUNDEL
M. MIYAZU

Le groupe devra communiqué le document révisé au secrétariat pour circulation auprès des membres du SC 6 avant le 31 mai 1983.

[illegible] OCTOBRE 1982

[illegible] 6 LE 15 OCTOBRE 1982

RESOLUTION - E

[illegible] decided to establish a second WG with the task of revising document N 72 "Acceptability of observations" and to take into account the discussions held on October 1982 together with any written comments. The membership of the working group is :

Mr GODFREY, Convenor
Mr SUTARNO
Mr MIYAZU

RESOLUTION - F

L'ISO/TC 46/SC 6 décide d'établir un 2ème groupe de travail chargé de réviser le document N 72 "Acceptabilité des résultats" en prenant en compte les discussions tenues le 15 octobre 1982 en complément des commentaires écrits contenus dans le document N 72.
Le groupe de travail se compose de :

M. GODFREY, Animateur
M. SUTARNO
M. MIYAZU

POOR

QUALITY

ORIGINAL